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EXAMINER

LAFORGIA, CHRISTIAN A

ART UNIT

PAPER NUMBER

2131

DATE MAILED: 09/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/497,774

Applicant(s)

STERN ET AL.

Examiner

Christian La Forgia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

1. The amendment filed on 07 July 2003 is noted and made of record.
2. Claims 1 through 47 are presented for examination.

#### ***Drawings***

3. The drawings were received on 07 July 2003. These drawings are accepted by the Examiner.
4. Applicant is reminded that the Patent and Trademark Office no longer makes drawing changes and that it is applicant's responsibility to ensure that the drawings are corrected in accordance with the instructions set forth in Paper No. 5, mailed on 05 February 2003.

#### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1 through 47 have been considered but are moot in view of the new ground(s) of rejection.
6. See further rejections that follow.

#### ***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 45 recites the limitation "said data flow." There is insufficient antecedent basis for this limitation in the claim.

#### ***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1 through 6, 8 through 29, 31 through 35, and 37 through 47 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent No. 5,815,662 to Ong, hereinafter Ong.

11. As per claim 1, Ong teaches a system for transmitting data in a data stream to grouped recipients, comprising:

a server, for receiving users' requests for transmission of user requested data in a data flow for reception by said users (Figure 1 [block 10]; column 2, lines 29-34; column 3, lines 42-56);

the server for transmission of at least one data stream, and responsive to the users' requests for arranging the users in at least one group of recipients of a respective data stream of the at least one data stream, with each user being arranged in a respective group of the at least one group, and wherein each respective group for receiving said user requested data in said respective data stream corresponding to a point of transmission of said data flow (Figure 2 [blocks TI1, TI2, Tii, Tin, 22]; column 2, lines 35-67; column 3, line 65 to column 4, line 17); and

the server, responsive to the arrangement of the users in said at least one group, for transmitting said user requested data in said respective data stream to each said respective group (Figure 2 [blocks TI1, TI2, Tii, Tin, 22]; column 3, line 65 to column 4, line 17).

12. Regarding claims 2, 37, and 42, Ong teaches wherein, the server realigns a respective user with said respective data stream to change the relative position of the respective user to the

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data being transmitted in said respective data stream, responsive to a signal from the respective user (Figures 4, 5; column 2, lines 53-67; column 3, line 65 to column 4, line 17; column 4, lines 42-54). The scheduler would be responsible for realigning the respective data stream to change the relative position of the user.

13. Regarding claims 3, 26, 38, and 43, Ong teaches wherein, the server arranges the users into the groups arranged by the size of the group (column 5, lines 16-31).

14. Regarding claims 4, 27, 39, and 44, Ong teaches wherein, the server arranges the users into the groups arranged by a time interval for assembling the group (column 3, line 65 to column 4, line 17).

15. Regarding claims 5, 28, and 34, Ong teaches wherein, the server is limited to a maximum number of the groups and arranges the groups in relation to the maximum number (column 5, line 66 to column 6, line 57; column 7, lines 27-44). It is inherent to the system to limit the number of groups due to physical limitations of the server such as buffers and memory, ergo Ong's discussion on the use of a statistical model.

16. Regarding claims 6, 29, and 35, Ong teaches wherein, the telecommunications medium is the Internet (Figure 1; column 1, lines 17-29; column 2, lines 29-34).

17. Regarding claims 8 and 40, Ong teaches wherein, the data is transmitted with identifiable locations in the data stream (Figure 2 [blocks 20, 22, 24, 26], 3; column 3, line 65 to column 4, line 9);

the server identifying a respective identifiable location in the data stream corresponding to the request (Figure 2 [blocks 20, 22, 24, 26], 3; column 3, line 65 to column 4, line 9); and

the server, moving the respective user to another of the groups receiving the data stream from another location in the data stream related to the respective identifiable location (column 4, lines 10-34; column 7, line 65 to column 8, line 13). It is inherent to the system of Ong to move a user to another group if they fast forward, rewind, pause or change the channel that they are viewing. Ong discusses the matter of synchronization throughout the patent and if a user requested a different location that coincided with another group in order to keep synchronization the user would obviously be transferred to another group.

18. With regards to claim 9, Ong teaches wherein, the related location is advanced in time of transmission of the data stream relative to the respective identifiable location (Figure 2 [blocks 20, 24, 26, 28, 30], 3; column 3, line 65 to column 4, line 17; column 7, line 65 to column 8, line 13).

19. Concerning claim 10, Ong teaches wherein, the related location is delayed in time of transmission of the data stream, relative to the respective identifiable location (Figure 2 [blocks 20, 24, 26, 28, 30], 3; column 3, line 65 to column 4, line 17; column 7, line 65 to column 8, line 13).

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20. With regards to claim 11, Ong teaches wherein, the server has a plurality of ports and with each the group connected to a respective port for receiving the data stream from separate respective locations in the data stream through a respective port (column 7, lines 16-58); and the server, moving the user to a the separate respective location in the data stream by reconnecting the user to another of the respective ports (column 7, line 65 to column 8, line 13). It is inherent to servers to have a plurality of data ports, especially when performing multicasting functions. Furthermore, if there were more than one channel being sent from the server to the groups, the server would have to send the channels on different ports.

21. Regarding claim 12, Ong teaches wherein, the server has a plurality of respective ports (column 7, lines 16-58); and,

the server is connected to users and the groups through separate respective ports (column 7, lines 16-58);

the server realigning a respective user with the data stream to change the data stream location the user is receiving the data or to change the time in the transmission of the data stream the user is receiving the transmission, by reconnecting the user to another of the respective ports (column 7, line 65 to column 8, line 13). It is inherent to servers to have a plurality of data ports, especially when performing multicasting functions. Furthermore, if there were more than one channel being sent from the server to the groups, the server would have to send the channels on different ports.

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22. Regarding claim 13, Ong teaches wherein, the respective ports have a plurality of respective sockets and the users are connected to respective sockets (column 7, lines 44-58);

the server has a plurality of pointers into separate respective locations in the data store associated with respective sockets, for sending data from the separate respective locations in the data store to the respective sockets and to the respective users associated with the respective sockets (Figures 1 [block 10c], 2 [blocks 20, 24, 26, 30], 3; column 3, line 65 to column 4, line 17; column 4, line 55 to column 5, line 31); and

the server realigning a respective user with the data stream to change the location in the data stream the user is receiving the data or the time in the transmission in the data stream, the user is receiving the data, by reconnecting the respective user to another respective socket connected to another respective pointer (column 7, line 66 to column 8, line 13).

23. Regarding claim 14, Ong teaches wherein the ports have a plurality of respective sockets and the respective users are connected to respective sockets (column 7, lines 44-58);

the server has a plurality of pointers, into separate respective locations in the data store, connected with respective sockets, for sending data from the separate respective locations in the data store to the respective sockets and the respective users connected to the respective sockets (Figures 1 [block 10c], 2 [blocks 20, 24, 26, 30], 3; column 3, line 65 to column 4, line 17; column 4, line 55 to column 5, line 31); and

the server realigning a respective user with the data stream to change the location in the data stream the user is receiving the data or the time in the transmission in the data stream, the



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user is receiving the data, by moving the pointer for a respective socket to another location in the data store (column 7, line 66 to column 8, line 13).

24. Regarding claim 15, Ong teaches wherein the position of the user relative to the data in the data stream is changed in relation to the location of the data being transmitted in the data stream (column 7, line 66 to column 8, line 13).

25. Regarding claim 16, Ong teaches wherein the position of the user relative the data in the data stream is changed in relation to the time of transmission of the data (column 3, line 65 to column 4, line 18; column 7, line 66 to column 8, line 13).

26. Regarding claim 17, Ong teaches further comprising:

means for signaling connected to the users for sending discrete respective signals to the server (column 4, lines 10-34; column 7, line 65 to column 8, line 13);

the server, responsive to the discrete respective signals, realigning a respective user with the data stream to change the relative position of the respective user to the data being transmitted in the data stream (column 4, lines 10-34; column 7, line 65 to column 8, line 13); and

wherein, the realignment is in discrete steps relative to position of the respective user to the data being transmitted in the data stream (column 7, line 66 to column 8, line 13).

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27. Regarding claim 18, Ong teaches wherein, the discrete respective signals include signals for advancing or retarding the realignment of the respective position of the respective user (column 7, line 66 to column 8, line 13).

28. Regarding claim 19, Ong teaches wherein, the discrete respective signals include signals for realignment in discrete intervals (column 3, line 65 to column 4, line 18; column 7, line 66 to column 8, line 13).

29. Regarding claim 20, Ong teaches wherein the discrete intervals are intervals of time displacement (column 3, line 65 to column 4, line 18; column 7, line 66 to column 8, line 13).

30. Regarding claim 21, Ong teaches wherein the discrete intervals are intervals of space displacement in the location of the data in the data stream (column 3, line 65 to column 4, line 18; column 7, line 66 to column 8, line 13).

31. Concerning claim 22, Ong teaches wherein, the server includes means for disconnecting a respective user with said respective data stream at an identifiable location in said respective data stream and for reconnecting the user to another data stream of the at least one data stream (column 7, line 65 to column 8, line 13).

32. With regards to claim 23, Ong teaches wherein, the server includes means for disconnecting the respective user with another data stream after a discrete interval and

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reconnecting the user with the data stream at the identifiable location (column 7, line 65 to column 8, line 13).

33. Concerning claim 24, Ong teaches wherein, the server means for reconnecting the user with the data stream is a pointer for accessing data in the data store at discrete locations (Figures 1 [block 10c], 2 [blocks 20, 24, 26, 30], 3; column 3, line 65 to column 4, line 17; column 4, line 55 to column 5, line 31; column 7, line 65 to column 8, line 13).

34. As per claim 25, Ong teaches a system for transmitting data in a data stream sent from a server to a plurality of users requesting access to the data stream at substantially the same time, and responsive to users' requests for data, arranging the users into groups by time or number of requests, for transmission of the same data in the data stream to the respective users in respective groups, and distributing the user load on the server and shifting the user load toward a steady state load by distributing the groups over the data transmission by time of the data transmission or place in the data transmission, comprising:

a server for transmitting user requested data in a data flow for reception by a plurality of users requesting said data at substantially the same time (Figure 1 [block 10]; column 2, lines 29-34; column 3, lines 42-56; column 7, lines 16-26);

the server having means for connecting the server to a telecommunications network for the transmission of data (Figure 1 [block 10e]; column 3, lines 42-56); and

the server including means for responding to user requests for data, said user requests being received from the telecommunications network, for identifying the individual requesters as

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the source of respective user requests for data and arranging the individual requesters in respective groups for receiving said user requested data in a data stream (Figure 2 [blocks TI1, TI2, TIi, Tin, 22]; column 2, lines 35-67; column 3, line 65 to column 4, line 17), and

wherein said respective groups arranging said individual requesters for reception of said user requested data in said respective data stream corresponding to a point of transmission of said data flow by time of request or by number of requests, for transmission of the same user requested data in said respective data stream to the respective users in respective groups, and distributing the user load on said server and shifting said user load toward a steady state load on the server by distributing said respective groups over the transmission of said data flow by time of data stream transmission or by place in said data flow transmission (Figure 2 [blocks TI1, TI2, TIi, Tin, 22]; column 3, line 65 to column 4, line 17).

35. With regards to claim 31, Ong teaches wherein the server includes means for shifting the respective individual requesters between the groups to change the time of reception of said user requested data relative to the data stream transmission (Figure 2 [blocks 20, 24, 26, 28, 30], 3; column 3, line 65 to column 4, line 17; column 7, line 65 to column 8, line 13).

36. With regards to claim 32, Ong teaches wherein, said user requested data is accessed from a data store communicatively coupled to the server (Figure 1 [block 12]); the server includes means for changing the location in the data store accessed for shifting the location of the user requested data relative to the data flow transmission (column 7, line 65 to column 8, line 13).

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37. As per claim 33, Ong teaches a method for transmitting data to users requesting the data, arranged in groups to receive the data, comprising the steps of:

receiving, at a server having a data store, user requests for transmission of user requested data in a data flow for reception by a plurality of users across a telecommunications medium (Figure 1 [block 10]; column 2, lines 29-34; column 3, lines 42-56);

responsive to said user requests, arranging said plurality of users in at least one group of recipients of said user requested data in said data flow with each user of the plurality of users being arranged in a respective group of said at least one group, and wherein each respective group for receiving said user requested data in a respective data stream corresponding to a point of transmission of said data flow (Figure 2 [blocks TI1, TI2, TIi, Tin, 22]; column 2, lines 35-67; column 3, line 65 to column 4, line 17); and

responsive to said user requests, sending said user requested data in a respective data stream from the data store of the server to the telecommunications medium, wherein each said respective data stream being destined for reception by said respective group of recipients (Figure 2 [blocks TI1, TI2, TIi, Tin, 22]; column 3, line 65 to column 4, line 17).

38. As per claim 41, Ong teaches a system for transmitting data in a data stream sent from a server to a plurality of users requesting access to the data stream at substantially the same time, a method comprising the steps of,

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a plurality of users receiving user requested data in a data flow by receiving at least one data stream sent from a server (Figure 2 [blocks TI1, TI2, TIi, TIn]; column 3, line 65 to column 4, line 17);

arranging said plurality of users into groups, comprising a first group and a second group, each of said groups for reception of a respective data stream transmitted from the server, each respective data stream corresponding to reception of user requested data at a point of transmission of said data flow (Figure 2 [blocks TI1, TI2, TIi, TIn]; column 3, line 65 to column 4, line 17); and,

responding, at the server, to a request from one of the plurality of users that is in said first group by moving the one of the plurality of users from said first group to said second group for reception, by said one of the plurality of users, of user requested data at a point of said data flow relatively displaced in space or time from reception by said first group (column 4, lines 10-34; column 7, line 65 to column 8, line 13).

39. As per claim 45, Ong teaches a computer program product for use in the operation of a computer transmitting data in a data stream to users requesting the data, the computer program product including computer instructions comprising instructions for:

connecting a telecommunications medium with said computer for sending said data in said data flow for reception by said users (Figure 1 [block 10e]; column 3, lines 43-56);

arranging the users in groups with each the user being arranged in a respective group, responsive to a request made by the user, and wherein each said respective group corresponding

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to reception by said user of user requested data in a data stream at a point in said data flow (column 3, line 65 to column 4, line 17); and

sending the data flow in a plurality of data streams from a data store for reception of user requested data at a plurality of points of said data flow by said groups of said users (column 2, liens 35-67).

40. As per claim 46, Ong teaches, a computer program product for use in operating a computer system, the computer program product including computer instructions comprising instructions for:

transmitting user requested data in a data flow sent in at least one data stream from a server to a plurality of users across a telecommunications network (column 2, liens 35-67);

arranging said plurality of users into groups according to reception of requests from said plurality of users for said user requested data, each of said groups corresponding to reception of user requested data in a data stream at a point in said data flow (column 3, line 65 to column 4, line 17); and,

responding to a request from one of the plurality of users by moving the one of the plurality of users from a first group to a second group for reception, by said one of the plurality of users, of user requested data at a point of said data flow relatively displaced in space or time from reception by said first group (column 7, line 66 to column 8, line 19).

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41. As per claim 47, Ong teaches a computer program product for use in operating a computer, the computer program product including computer instructions comprising instructions for:

receiving requests for data from users, said data being organized for transmission in a data flow from a data store (column 3, line 65 to column 4, line 17);

arranging the users in groups, wherein each of said groups corresponding to reception of user requested data in a data stream at a point of said data flow (column 3, line 65 to column 4, line 17); and

responsive to the users' requests, sending said user requested data in at least one data stream from the data store to the groups with the groups receiving separate respective portions of the data relatively displaced in space or time (column 2, lines 36-67; column 7, line 66 to column 8, line 19).

***Claim Rejections - 35 USC § 103***

42. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

43. Claims 7, 30, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ong in lieu of obviousness.

44. Regarding claims 7, 30, and 36, Ong teaches toward wherein, the user's requests are received from a World Wide Web browser (column 3, lines 42-56). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a World Wide Web browser to the system of Ong. As Ong discusses there has been a move toward video-on-demand on the Internet, and one of ordinary skill in the art would recognize in order to access



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such a service one would need a Web browser with capabilities of supporting some type of streaming media capabilities.

***Conclusion***

45. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

46. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

47. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian La Forgia whose telephone number is (703) 305-7704. The examiner can normally be reached on Monday thru Thursday 7-5.

48. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (703) 305-9648. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

49. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

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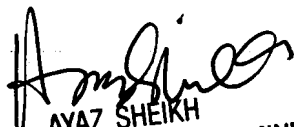
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Christian La Forgia

Patent Examiner

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